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COURSE BROCHURE

Sour Gas and H2S Field Safety Training Course

1 – 5 March 2027
Madrid

Sour Gas and H2S Field Safety Training Course

Ref: 1447_53843 **Date:** 1 – 5 March 2027 **Location:** Madrid **Fees:** 6200 GBP

Sour Gas and H2S Field Safety is a 1-week training course for field supervisors and HSE officers who work on wellsites, gathering stations and plants handling hydrogen sulphide, and who leave with an H2S contingency plan for their own site. As more sour reservoirs come on stream and workforces mix operator and contractor crews, a single unnoticed release can harm several people in seconds. Jupiter Prime Training delivers this sour gas and H2S field safety course.

Why Sour Gas and H2S Field Safety Matters Now

Three pressures shape sour field safety today: new developments in reservoirs with higher hydrogen sulphide content; contractor crews who rotate between sites with different detection, breathing apparatus and muster rules; and communities and partners who expect operators to prove that releases are prevented and contained. Sites that manage H2S well detect leaks early, keep breathing air ready and rehearse rescue so that no one enters a gas cloud unprotected. Sites that do not suffer multiple-casualty events, often among would-be rescuers. The course draws on established H2S awareness, gas testing and emergency response practice used across sour oil and gas operations.

Who Gains Most from Sour Gas and H2S Field Safety

- Supervisors who authorise work in areas where hydrogen sulphide may be released
- HSE officers who specify detection, alarms and breathing apparatus for sour sites
- Permit issuers who approve line breaking, tank entry and well interventions in sour service
- Emergency coordinators who plan muster, evacuation and rescue from gas clouds
- Contractor representatives who prepare crews for sour field induction

Sour field operating departments gain most when supervisors, HSE officers and contractor leads attend together and agree one H2S response routine.

Sour Gas and H2S Field Safety Capabilities

Participants learn to recognise where hydrogen sulphide hides in field equipment and to keep every crew member out of harm before, during and after a release.

- Assess H2S release points across wells, separators, tanks and pipelines — area classification
- Specify fixed and personal gas detection and alarm settings — detection system design
- Apply permit to work controls for sour line breaking and entry — job authorisation
- Test breathing apparatus readiness and buddy procedures — crew protection
- Design muster, wind direction and rescue arrangements — emergency response decisions
- Communicate sour site rules to rotating contractor crews — induction and briefings

Key Sour Gas and H2S Field Safety Terms

- Hydrogen sulphide — A toxic, flammable gas found in sour reservoirs that deadens the sense of smell at dangerous concentrations.
- Sour service — Equipment and operations exposed to fluids containing hydrogen sulphide, requiring special materials and controls.
- Gas testing — Measuring the atmosphere with calibrated detectors before and during work to confirm safe entry or continued work.
- Self-contained breathing apparatus — A portable air supply that protects the wearer in toxic atmospheres during escape or rescue.
- Muster point — A pre-agreed safe assembly location, chosen with wind direction, where personnel are counted after an alarm.
- H2S contingency plan — A site document setting detection, alarm, evacuation and rescue steps for a hydrogen sulphide release.

Sour Gas and H2S Field Safety Day by Day

Day 1: Hydrogen Sulphide Hazards in Sour Fields

- H2S Properties, Toxicity and Exposure Effects — Setting Crew Awareness Levels
- Sour Reservoir and Process Release Points — Mapping Where Gas Appears
- Lessons From H2S Fatalities and Rescuer Casualties — Prioritising Prevention
- Sour Service Materials and Sulphide Stress Cracking — Recognising Equipment Weaknesses
- Hazard Identification at Sour Wellsites — Ranking Field Activities by Exposure

Day 2: Detection, Gas Testing and Protection

- Fixed Gas Detection Layout and Alarm Levels — Designing Site Coverage
- Personal Monitors and Bump Testing Routines — Confirming Detector Reliability
- Atmospheric Gas Testing Before Work — Approving Safe Entry
- Breathing Apparatus Selection and Inspection — Protecting Workers in Toxic Atmospheres
- Wind Socks and Safe Briefing Areas — Positioning Crews Upwind

Day 3: Controlling Sour Work Activities

- Permit to Work for Sour Line Breaking — Authorising High-Risk Jobs
- Confined Space Entry in Sour Vessels and Tanks — Preventing Entrant Exposure
- Simultaneous Operations on Sour Sites — Separating Conflicting Activities
- Well Intervention and Workover in Sour Wells — Planning Release Barriers
- Contractor Induction for Sour Fields — Aligning Rotating Crews

Day 4: Sour Field Emergency Response

- Release Scenarios and Gas Cloud Behaviour — Estimating Hazard Zones
- Alarm, Muster and Headcount Procedures — Accounting for Every Person
- Rescue Teams and Buddy Systems — Preventing Secondary Casualties
- Community Alert and Road Blocking Arrangements — Protecting Nearby Residents
- Drill Planning and Debrief Methods — Testing Response Readiness

Day 5: Practising the H2S Contingency Plan

- Sour Wellsite Hazard Map — Applying Release Point Identification
- Detection and Breathing Air Specification — Applying Protection Choices
- Simulated Release and Rescue Drill — Applying Emergency Procedures
- Permit and Contractor Briefing Pack — Applying Work Controls
- H2S Contingency Plan — Presenting Detection, Muster and Rescue Arrangements

Applying Sour Gas and H2S Field Safety After the Course

- Walk one sour site with its supervisor and update the H2S release point map and detector coverage.
- Run a short release drill with muster and headcount, then record gaps in breathing apparatus readiness.

Sour Gas and H2S Field Safety Questions FAQ

What is sour gas and H2S field safety and why does it matter now?

Sour gas and H2S field safety is the set of detection, protection, work control and emergency measures that keep crews safe where hydrogen sulphide may be released. It matters now because more sour fields are being developed with mixed contractor workforces.

Which roles gain most from sour gas and H2S field safety training?

Field supervisors, HSE officers, permit issuers, emergency coordinators and contractor leads gain most. You benefit if you authorise work, specify gas detection or plan rescue on sour sites.

How does sour gas and H2S field safety differ from a general field supervisor safety course?

This sour gas and H2S field safety course concentrates on hydrogen sulphide hazards, gas testing, breathing apparatus and sour emergency response, while general supervisor safety courses cover daily shift routines across all hazards.

What do you bring back from sour gas and H2S field safety training?

You bring back an H2S contingency plan with a release point map, detection and breathing air specification, muster and rescue steps, and a contractor briefing pack.

Sour Gas and H2S Field Safety: The Way Forward

The H2S contingency plan becomes the reference for the next sour site drill and contractor induction, first informing where detectors and breathing air are placed. Supervisors, HSE officers and emergency coordinators use it to act as one during a release. After its first use, revisit the muster and rescue steps once a drill shows how long headcount and casualty recovery really take.